

## **BI-DIRECTIONAL ACCESS POINT**

### **ABSTRACT OF THE DISCLOSURE**

An improved bi-directional access point includes an impedance boosting section in conjunction with an interface section to a bi-directional communication path. The impedance boosting section incorporates a transformer tap output that couples to an access connection point where signals on the bi-directional communication path may be monitored. The impedance boosting section may be a tapped transformer winding that includes  $N1$  turns above the winding tap and  $N2$  turns below the winding tap, where  $N1 > N2$ . The interface section may be implemented as a resistive interface section. Additionally, the bi-directional access point may further include a tuning section for the access connection point. Implemented as a resistive network, for example, the tuning section may help establish a tap value and return loss through the access connection point below a prescribed level (e.g., -20 dB).